

Internal and Deliberative PFAS in Pesticide Packaging Inquiries

Pesticidepackaging <[HYPERLINK "mailto:Pesticidepackaging@epa.gov" \t "_blank"]>

From: Florida Department of Agricultural Environmental Services

Incoming:

We saw the recent article regarding Permanone 30-30 (copied below). Does EPA have similar guidance for consumers as was put out for Anvil 10+10? Should mosquito control programs red tag any existing stocks?

Response:

Ex. 5 Deliberative Process (DP)

From: Minnesota Department of Agriculture

Incoming:

I am Raj Mann, Section Manager for the Pesticide Non-point Section at the Minnesota Department of Agriculture. I have few questions regarding PFAS chemicals and pesticide active ingredients. In our last call on March 5, EPA confirmed that no PFAS chemicals are registered as pesticides. However, while reading more about these chemicals, I came across the following EPA webpage which hosts a master list of PFAS chemicals: [HYPERLINK "https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcomptox.epa.gov%2Fdashboard%2Fchemical_lists%2Fpfasmaster&data=04%7C01%7CLara.Rhina%40epa.gov%7C6550359a832d40ab097208d8f0be5e07%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637524047694553067%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=ZPdRlqRxBZHIqS7VcNw6WMFYoEXMGfDAN%2B%2FaR4%2F%2BKUQ%3D&reserved=0" \t "_blank"]. Several pesticide active ingredients appear in the PFAS master list, including Lufenuron, Noviflumuron, Tetraconazole, and Pyrifluquinazon. The reason for the inclusion of these pesticide active ingredients is unclear beyond the fact that they contain fluorine atoms. The webpage states that there is no clear definition of PFAS chemicals (see excerpt below).

"There is no precisely clear definition of what constitutes a PFAS substance given the inclusion of partially fluorinated substances, polymers, and ill-defined reaction products on these various lists. Hence, PFASMASTER serves as a consolidated list of substances spanning and bounded by the below lists, defining a practical boundary of PFAS chemical space (within DSSTox) of current interest to researchers

and regulators worldwide. This PFAS Master List will continue to expand as component lists grow. (Last Updated: September 16th 2020)."

My questions are as follows:

1. Given that EPA has maintained that no PFAS chemicals are registered as pesticide active ingredients, why are some pesticide active ingredients included in this master list?
2. Is the EPA's conclusion that no pesticide active ingredients are PFAS based on a different definition? If so, what definition is being used.
3. How is this master list created?
4. Do these pesticides qualify as PFAS or are they included only because researchers have interest in them?
5. Are there any known potential concerns about these pesticide active ingredients?

Response:

1. ***Given that EPA has maintained that no PFAS chemicals are registered as pesticide active ingredients, why are some pesticide active ingredients included in this master list?***

Each pesticide product submitted for registration is evaluated considering all the ingredients in the product, including both active and inert ingredients. The pesticide active ingredients in the EPA Office of Research and Development PFAS Master List are included due to their fluorinated structures. However, currently registered pesticides do not contain ingredients that have structures or properties comparable to prominent PFAS.

2. ***Is the EPA's conclusion that no pesticide active ingredients are PFAS based on a different definition? If so, what definition is being used.***

EPA's Office of Pollution Prevention and Toxics applies the following "working definition" when identifying PFAS on the TSCA Inventory: a structure that contains the unit $R-CF_2-CF(R')(R'')$, where R, R', and R'' do not equal "H" and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included).

3. ***How is this master list created?***

Ex. 5 Deliberative Process (DP)

4. ***Do these pesticides qualify as PFAS or are they included only because researchers have interest in them?***

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5. ***Are there any known potential concerns about these pesticide active ingredients?***

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